Abstract

A method of preparing ammonium glyphosate suitable for preparation of water-soluble solid ammonium glyphosate formulation by an extraction with organic solvent in a gas-liquid-solid phase system, which comprises adding glyphosate and water into a reactor with a stirer, introducing ammonia to carry out the reaction, an aqueous solution of ammonium glyphosate is formed after the reaction is completed; adding a water-soluble organic solvent such as methanol and/or ethanol and/or methylal to decrease the solubility of the ammonium glyphosate in the system, thereby crystallizing out ammonium glyphosate; and filtering in suction or further oven-drying to obtain the solid ammonium glyphosate. The organic solvent may be recovered and reused by rectifying or distilling, the remainder residue may be returned to the reaction procedure or used in the preparation of the aqueous formulation of ammonium glyphosate.